

# Microsystems Technology Symposium

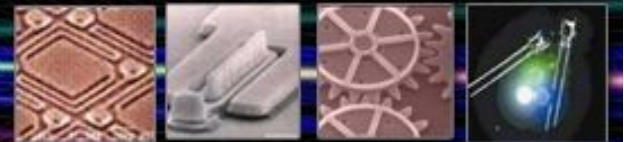


**March 5-7, 2007**  
**San Jose, CA**



**MICROSYSTEMS TECHNOLOGY SYMPOSIUM**  
**ENABLING THE FUTURE**

MARCH 5 - 7, 2007 • SAN JOSE, CALIFORNIA



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## Why We Are Here

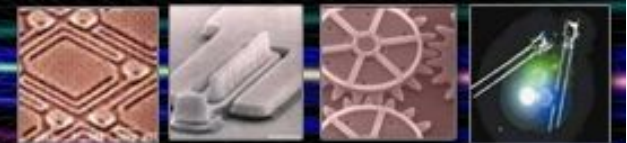


**Expand the dialogue on future directions for Microsystems technology research that will enable new platform capability.**



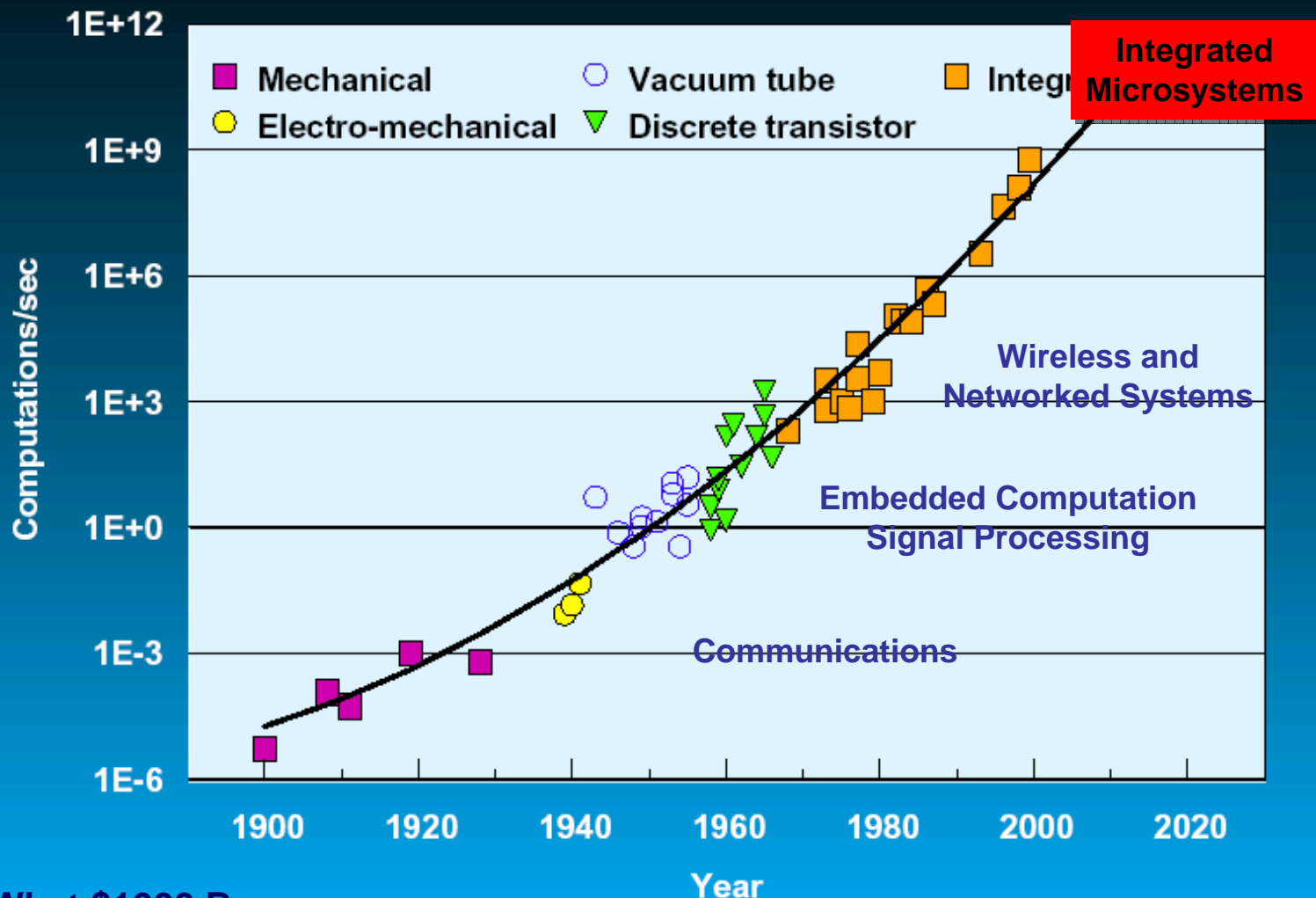
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# Progression of Microtechnology



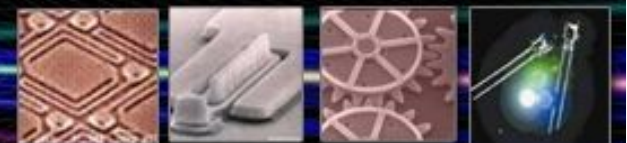
What \$1000 Buys

after Kurzweil, 1999 & Moravec, 1998



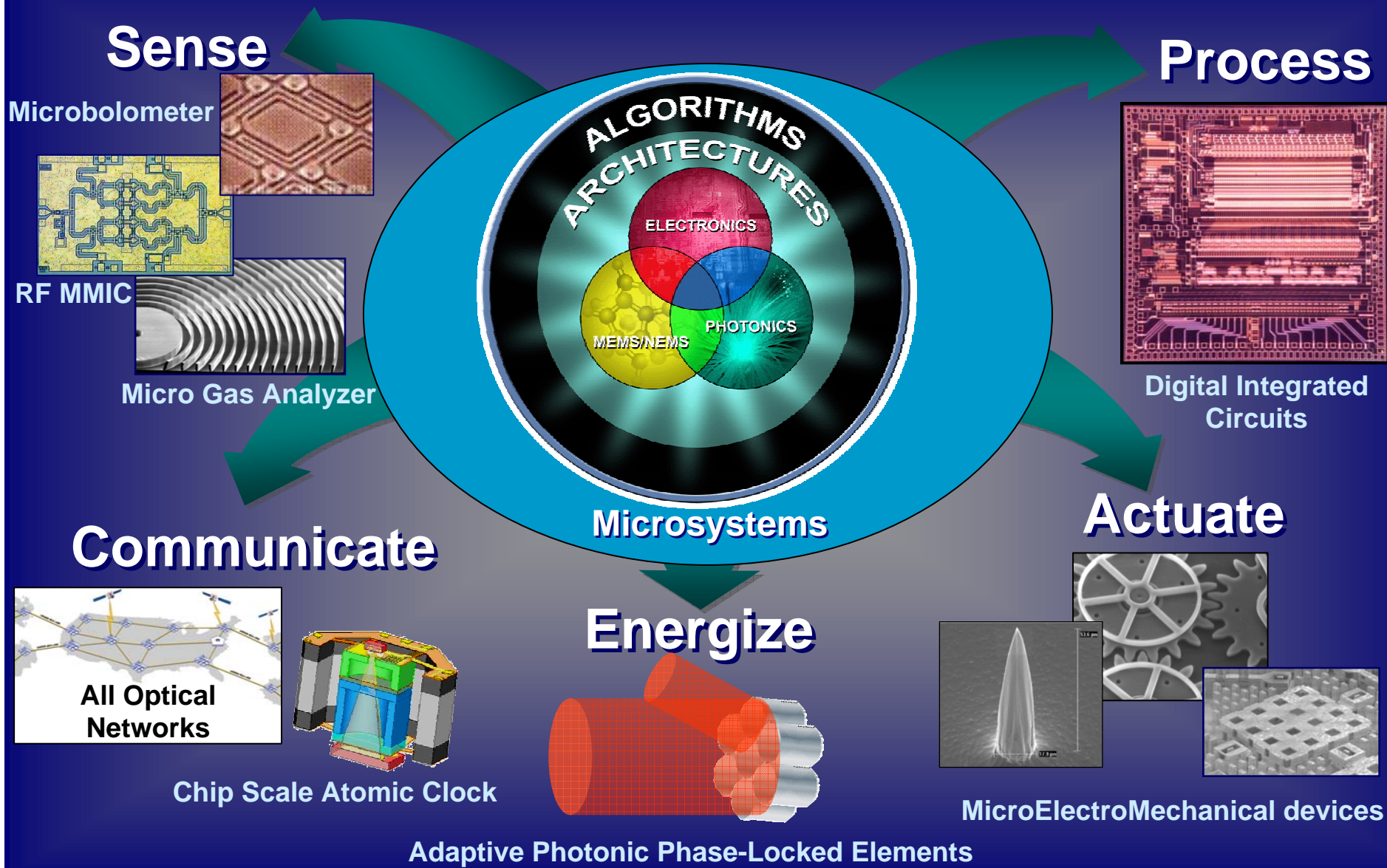
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# Microsystems Technology Office: Enabling Future Capability







# Agenda at a Glance

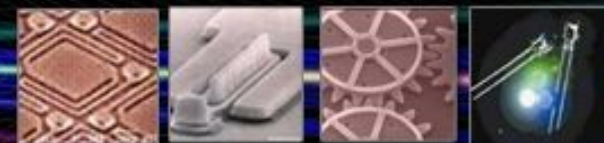


|      | Monday<br>March 5, 2007                                    | Tuesday<br>March 6, 2007                          | Wednesday<br>March 7, 2007      |
|------|--|---|---------------------------------|
| 0700 | Registration (Imperial Foyer)                              | Registration (Imperial Foyer)                     | Registration (Imperial Foyer)   |
| 0730 | Continental Breakfast                                      | Continental Breakfast                             | Continental Breakfast           |
| 0800 | (Regency Ballroom)   | (Regency Ballroom)                                | (Regency Ballroom)              |
| 0830 | Opening Remarks  | Introduction                                      | Plenary: Dr. Haensch            |
| 0900 | Keynote: Dr. Leheny  | Plenary: Dr. Wineland                             | Energize<br>(Imperial Ballroom) |
| 0930 | Sensing<br>(Imperial Ballroom)                             | Processing<br>(Imperial Ballroom)                 |                                 |
| 1000 |  |   |                                 |
| 1030 |  |   |                                 |
| 1100 |  | MTO Initiatives / Future Directions<br>Dr. Zolper |                                 |
| 1130 |  |   |                                 |
| 1200 | Lunch<br>(Regency Ballroom)                                | Lunch<br>(Regency Ballroom)                       | Lunch<br>(Regency Ballroom)     |
| 1230 |  |   |                                 |
| 1300 | Communciation<br>(Imperial Ballroom)                       | Actuation<br>(Imperial Ballroom)                  |                                 |
| 1330 |  |   |                                 |
| 1400 |  |   |                                 |
| 1430 |  |   |                                 |
| 1500 |  |   |                                 |
| 1530 |  |   |                                 |
| 1600 |  |   |                                 |
| 1630 |  |   |                                 |
| 1700 |  |   |                                 |
| 1730 |  |   |                                 |
| 1800 | Welcome Reception/<br>Poster Session<br>(Regency Ballroom) | Reception   |                                 |
| 1830 |  | Banquet & Speaker:                                |                                 |
| 1900 |  | Dr. Arati Prabhakar                               |                                 |
| 1930 |  | (Regency Ballroom)                                |                                 |



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# Symposium Structure



## Thrust Area Section Organization:

- **Keynote/Plenary Talks**
  - **DARPA/MTO PM Presentations**
    - **Panel Discussions**
  - **Performer/Industry Presentations**
    - **Panel Discussions**

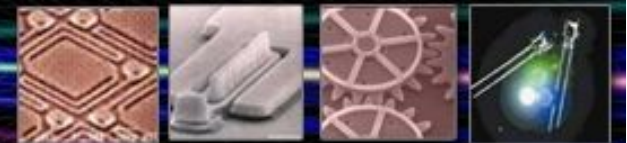
## **Additional Events:**

- **Poster Reception**
- **Banquet/Keynote Presentation**



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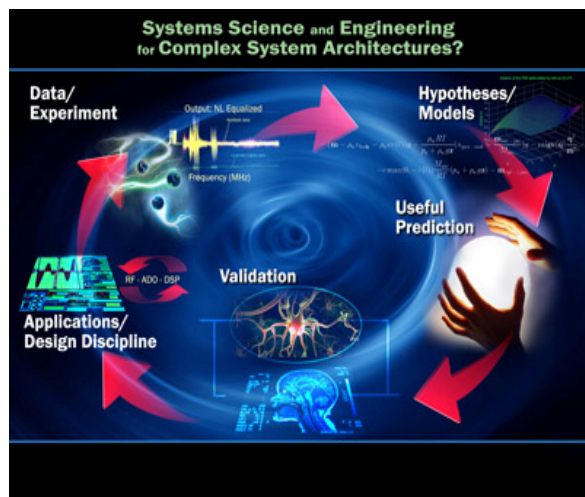
# MTO Initiatives



Chip Scale Avionics



Young Faculty Award



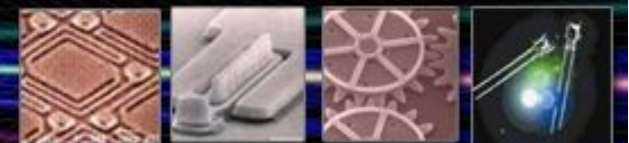
## Complex Systems Architectures (CSA)

- CSA Website: Forums, Wiki, Community
- Please register at the CSA display area just outside the main convention room.



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# Plenary Speakers



**Tuesday Morning:**

**Dr. David Wineland,  
NIST**

**Topic:  
Quantum Science and Technology**

**Wednesday Morning:**

**Dr. Wilfried Haensch,  
IBM**

**Topic:  
Future Directions and Challenges for  
Scaled CMOS**

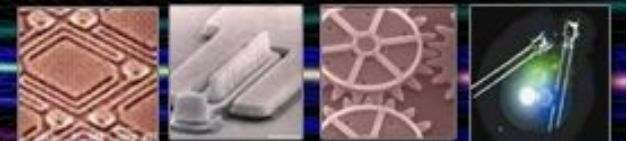
**Banquet Speaker:  
Dr. Arati Prabhakar  
Partner,  
US Venture Partners**

**Dr. Prabhakar is a Former MTO Director and Former Director of NIST.**



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## Keynote Speaker

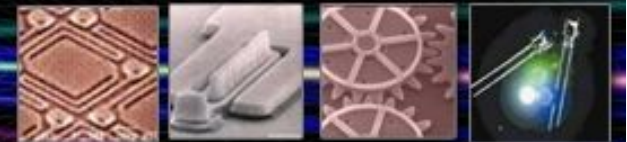


# Dr. Robert Leheny Deputy Director, DARPA



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